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ABSTRACT

This investigation, using Nuttin Motivation Relational Theory (1985), was designed to analyze the main motivational objectives responsible for the university and professional fulfillment of teachers and future teachers. It also analyzed how those objectives are distributed in both intrinsic and extrinsic terms, as well as the relation between motivational orientation and motivational intensity in the two fulfillment spheres (university and professional) referred to above. Two sample groups, one of 83 individuals and one of 109, verified that the motivational objectives of university fulfillment are arranged according to two factors--one corresponding to an intrinsic dimension of the motive's concreteness and the other to an extrinsic dimension, while the objectives responsible for professional fulfillment presented a "complex" distribution. On the other hand, the motivational intensity was significantly superior in relation to the motivational objectives of professional fulfillment than in relation to the objects of university fulfillment. Also obtained was a relationship between the motivational orientation degree and the motivational intensity for relating fulfillment motivational objects, expressly for university fulfillment, but not for professional fulfillment. (Contains 16 references.) (Author/ND)

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INTRINSIC AND EXTRINSIC MOTIVATIONAL OBJECTS IN TEACHERS AND FUTURE TEACHERS

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ABSTRACT

This investigation goes with Nuttin Motivation Relational Theory, and its aim is to analyse which are the main motivational objects responsible for the university and professional fulfilment of teachers and future teachers. It also tries to analyse how those objects are distributed in terms of intrinsecal and extrinsecal, as well as the relation between the motivational orientation and the motivational intensity in the two fulfilment spheres refered to before.

For that, four instruments were constructed: O.M.-Course, O.M.-Profession, E.M.-Course Scale, and E.M.-Profession Scale.

With the essays carried out with two samples, one of 83 individuals and other of 109, we verified that the motivational objects of university fulfilment are arrenged according to two factors, one corresponding to an intrinsic dimension of the motive's concreteness and the other to an extrinsic dimension, while the objects responsible for the professional fulfilment present a "complex" distribution. On the other hand, we noticed that the motivational intensity is significantly superior in relation to the motivational objects of professional fulfilment than in relation to the objects of university fulfilment. We also obtained a relation between the motivational orientation degree and the motivational intensity for the relating fulfilment motivational objects, expressive for university fulfilment, but not so for the professional fulfilment.

KEY-WORDS: Teacher Motivation; Teachers; Preservice Teachers; Professional Goals; Professional Fulfilment.

INTRINSIC AND EXTRINSIC MOTIVATIONAL OBJECTS IN TEACHERS AND FUTURE TEACHERS

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INTRODUCTION

According to Nuttin's Relational Theory (1967, 1980a, 1980b, 1985) one refers as motivation to the intrinsical exigency of the relationships with the world, specified by the motives. These are defined as schemes or scatches of relationships between the subject and the world. For a healthy personality development it is necessary the concretization of such relationships (Abreu, 1982). One is to distinguish the biophysiological, social, and cognitive motifs, all of them primary or of indispensable satisfaction.

On the other hand, taking into account the plasticity of the concretization or the objectal undertimination of the motifs, it can be diverse the alternative objects of the subject's world of relationships that allow such concretization. These objects, because they are framed in the system of the relation/concretization of the motifs, are considered motivational objects. These are the privileged objects of the texture of the subject's relationships who, then, shows in relation to them his/her interests or preferences. They can exist in a cognitive level, that is, in perspective or in a project of action, and in a behavioral concretization level, that is, of an efective relation. In this theoretical context, the motivation, while an exigency of a personality relation, is always

intrinsecal, but the motivational objects can be intrinsecal, if the concretization is refered to the subject himself, to his/her development and realization, or extrinsical, if the relationship is related to objects or situations external to the subject.

Nuttin (1980) proposed a technique of phrase completation, the Motivational Induction Method (M.I.M.), to obtain samples of motivational objects. Simultaneously he presented some content categories to classify the diverse motivational objects expressed by subjects, among them we point out the following:

S (Self): refering to an aspect of the person's personality or the personality as a whole.

SR (Self-realization): encompassing the activities that are related to the realization of the subject's personality or one of its aspects.

R (Realization): refering to the activities that are related to an useful achievement; to be distinguished the general activity (R), the professional activity (R2), and the school activity (R3).

C (Contact): related to the need of social contact; one is to distinguish the contact with others (C), the reciprocity of contact (C2), and desires inrelation to others (C3).

E (Exploration): related to cognitive needs.

P (Possession): refered to the desire of the aquisition of material things.

The purpose of this research is to analyse which are the main motivational objects responsible for the university and professional realization of future and present teachers, classify them according to the categories above refered, and verify as they are distributed in terms of intrinsecal and extrinsecal.

One has also the intention to analyse the motivational intensity related to these objects and the existing relation between the intensity and the motivational orientation.

METHODOLOGY

1. Construction of the instruments

Initially were constructed two instruments based on Nuttin's[1] Motivational Induction Method (M.I.M.), specified for university formation and professional performance, being the Q.I.E.M.-Course and the Q.I.E.M.-Profession, respectivelly. These instruments put the subjects in situations in which they express their motivational objects in those situations, through the following items:

A) Q.I.E.M.-Course:

- With my candidature to a BA degree I wish ...
-With my candidature to a BA degree I Would like very much to ...
- With my candidature to a BA degree I Would eagerly ...
- With my candidature to a BA degree I Would strive for ...

B) Q.I.E.M.-Profession:

- In my future profession I wish ...
- In my future profession I Would like very much ...
- In my future profession I would eagerly ...
- In my future profession I Would strive for ...

Each one of the above instruments was administered to 32 students of the Educational Formation Branch of the Faculty of Letters of the University of Coimbra. The answers were submitted to three judjes for a content analysis, according to Nuttin's categories. It was obtained a percentage of agreement of 85,7% for the Q.I.E.M.-Course, and of 92,9%

for the Q.I.E.M.-Profession. Additionally we were able to get 130 motivational objects in the responses to the Q.I.E.M.-Course, and 144 in the Q.I.E.M.-Profession, distributed by 10 content categories or sub-categories (see Table 1).

Insert Table 1 here

From the motivational objects more frequently expressed(2), were constructed two instruments to evaluate the level of motivational intensity(3) relativelly to the university realization and to professional realization, the E.M.-Course Scale and the E.M.-Profession Scale (Jesus, 1990), respectivelly. These instruments comprise the following items/motivational objects, corresponding to the content categories that are refered in front of each item.

A) E.M.-Course Scale:

1. Learning something new (E)
2. Being able to get fulfillment at several levels (SR)
3. Helping others in their formation (C3)
4. To obtain achievement (R3)
5. To broaden my cultural universe (E)
6. To get easier access to the world of work (R2)
7. To develop some aptitudes (SR)
8. To enter a profession which will fullfill me (R2)
9. To enrich myself intelectually (S)
10. A valid training for the world of work (R2)

B) E.M.-Profession Scale:

1. To carry on taskes in the most competent way (SR)
2. Establishing good relationships with the students (C)

3. To do my best (S)

4. To improve as the time goes by (SR)

5. Finantial stability (P)

6. Comunicate with my students (C)

7. To be competent (S)

8. To go through gratifying experiences (S)

9. To perform my duties the best as possible (R2)

10. To have a good work environment (C)

Besides this two scales to evaluate the motivational intensity, were also elabored two questionnaires to evaluate the subject's motivational orientation intensity in relation to the chosen course and the profession of teacher, the O.M.-Course and the O.M.-Profession, respectivelly. Each one of the above instruments had the following possibilities of response:

A) O.M.-Course:

The college course I have chosen was...

- my first option.

- my secondary option.

B) O.M.-Profession:

The professional objectives that I have are...

- if I could I would like to do other professional activity than of the teacher.

- at the moment, I would like to pratice the professional activity of teacher, although later on I might prefer other.

- I really want to practice the professional activity of a teacher.

In this research we developed the following instruments to be used in this study: O.M.-Course, O.M.-Profession, E.M.-Course Scale, and E.M.-Profession Scale.

2) Hypothesis

A) The motivational objects of the S, SR, and E categories constitute intrinsecal motivational objects, because they refer to the subject himself, to his/her development, and realization, while the ones from the R, C, and P categories constitute extrinsecal motivational objects, because they are inherent to objects or situations exteriors to the subject.

B) A great motivational orientation, that is more directed or with a basis in an atribution of a greater degree of certainty, for the course attended and for the profession of teacher, leads to great motivational intensity towards the motivational objects which permit the concretization of the university and professional realization motifs, respectivelly.

C) The motivational intensity in relation to the motivational objects responsible for the professional realization is great than the motivational intensity expressed in relation to the university realization objects(4).

3) Sample

Studies were conducted with two samples of students in the Branch of Educational Formation of the Faculty of Letters of the University of Coimbra, some with and others without professional experience as teachers. One sample was constituded by 83 subjects (sample A) and other by 109 subjects (sample B)(5).

4) Results

The statistical analysis of the results was done using the Statview 512 + TM program (Felman & Gagnon, 1986) in a Macintosh computer. Initially we conducted item total correlations for all individual items, for both scales, the EM-Course (see Table 2), and the EM-Profession (see Table 3), respectivelly. We verified that in both cases, the item-total correlations were substantially greater than 0.3, value that Reckase (1984) indicated as a low correlation for items in Likert type scales. Thus, all items were taken in consideration for the subsequent analyses which were.

Insert Tables 2 and 3 here

Then, with the purpose to analyse how the items would group into factors, we conducted factorial analyses according with the method of orthogonal transformation "varimax" with extraction of the principal components, trying to select two factors in each of the analyses. In the analysis carried on with the data from the EM-Course scale (see Table 4), we verified that, in each of the samples, the items considered as intrinsecals (1, 2, 5, 7, and 9)(6) had saturations in the factor 1, while the items considered as extrinsecals (3, 4, 6, 8, and 10) had saturations in the factor 2. It is noteworthy to point out that in both samples the two factors explain 50% of the variance and present a low correlation among each other, suggesting that are independent from each other.

Insert Table 4 here

On the other hand, the results obtained with the EM-Profession scale (see Table 5) revealed more complexe to analyse as one is unable to correspond the items considered as intrinsecal to one factor and the extrinsecal to another. However, it is important to point out that the two factors explain, in both sanples, around 60% of the variance. Taking also in consideration the communalities, we can verify that, in the results of both Scales, all the items have a weight greater than 0.3 in the explanation of the variance.

Insert Table 5 here

Then, one studied the effects of the influence of the degree of motivational orientation in the variance of the motivational intensity, for which it was analysed the diferences between the results obtained in E.M.-Course Scale (see Table 6) and in E.M.-Profession Scale (see Table 7), with Anova, for the subjects of sample B in each one of the motivational orientation situations. One verifies that as greater as it is the motivational orientation for an objective, is greater the motivational intensity corresponding to the motivational objects relative to that objective/possibility. This happenned in significative form in relation to the Course, in which was obtained an $F(1.108) = 4.161$; $p=.0438$, but not for the Profession, in which was obtained an $F(1.108)=1.513$; $p=.225$.

Insert Tables 6 and 7 here

We already verified that between the intensity of university fulfilment and professional fulfilment the correlation is .518, and that the first could explain the variance of the second because is obtained

$F(1,108)= 38.23$; $p=.0001$ (see Table 8). In the motivational orientation to the course and to the profession relations was obtained $F(1,108)= .037$; $p=.8475$, sugesting that the more course oriented subjects wasn't to much oriented to teacher profession.

Insert Table 8 here

Comparisons of the means and standard deviations of the items initially considered intrinsecal and extrinsecal, were also made either in the E.M.-Course Scale (see Table 9), or in the E.M.-Profession Scale (see Table 10). To test the above mean differences was conducted a two-sample t-test. It was verified that in both Scales the mean of the intrinsecal items is significatively greater than the extrinsecal item means. Simultaneously, the scores obtained in the EM-Profession Scale are significatively higher than the ones obtained for the EM-Course Scale, for both groups of items, intrinsecals ($p=.035$) and extrinsecals ($p=.0001$).

Insert Tables 9 and 10 here

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5) Discussion of the results

The results obtained with the EM-Course Scale in both samples revealed that the variance of the intrinsecal motivational objects (S, SR, and E categories) is explained by the factor 1, independent from the factor 2 which explains the variance of the extrinsecal motivational objects (R2, R3, and C3 sub-categories), as was initially hypothesized, suggesting that one can discriminate both of those groups of motivational objects in the

university realization of the subjects. The same distinction can not be done for the motivational objects responsible for the teacher' s professional realization. It was verified that the items from the Scale EM-Profession do not distribute themselves among the two factors explanatory of the results, according to the fact of being intrinsecal or extrinsecal items.These results can be understood if one has into consideration that, in both samples, the two factors present a high correlation with each other, suggesting their interdependency. Simultaneously, the first factor presents a high eighenvalue, that is, in both samples only the first factor permits to explain more than 44% of the total variance, suggesting that for the professional realization there is, above all, one factor that explains the results variance, where intrinsecal and extrinsecal motivational objects are mixed with each other. The importance that the profession has for the individual realization, satisfaction, and identity construction (Crozier, 1969, Erikson, 1968; Rain, Lane & Steiner, 1991) perhaps leads one to accept that, for the profession, the distinction between an intrinsecal and an extrinsecal dimension must be related to the person' s motivational orientation(7) and not as much as to the form of concretization of the motifs, that is, through the motivational objects.

The influence of the motivational orientation in the motivational intensity revealed significative for the university realization in which a higher motivational orientation towards the attended course leads to a higher motivational intensity in terms of the motivational objects responsible for that realization, as it was predicted in hypothesis B. In relation to the profession the tendency is the same, that is, a higher motivational orientation towards the teacher profession corresponds to a higher motivational intensity in relation to the objects which allow the

realization at this level, but does not show in a significative form. Perhaps the "uncertainty" that actually is lived in relation to the possibility of the concretization of professional objectives and the actual teacher' s situation, being factors which are interfering in the influence of the motivational orientation on the motivational intensity, that is, the individuals can be really channeled to the teacher profession (motivational orientation) but, simultaneously, have the conscience of the existing difficulties for realization and satisfaction in such profession, therefore, they do not manifest very high expectations (motivational intensity) in relation to the concretization of the motivational objects responsible for the professional realization at this level. On the other hand, the motivational orientation for the course does not rebound in the orientation for the profession, that is, the individuals more oriented for the higher education course are not the most oriented towards the teaching profession. One explanation for this is that the great majority of the students who attend the educational branches of the classical University did not make an initial option for the teaching profession, being there just because of the few professional oportunities (Gonçalves, 1986, 22). We also verified that the motivational intensity is significatively higher for the motivational objects of professional realization than in relation to the objects of university realization, as was predicted in hypothesis C. Perhaps because the university realization belongs to the present past-present, while the profession presents itself as making part of the present-future of the individuals. These results have support from the Motivational Relational Theory as has been verified that a larger future time perspective permits the development of more positive expectations and attitudes (Nuttin, op.

cit.), that is, of a greater motivational intensity in relation to the motivational objects.

REFERENCES

ABREU, M. V. (1982). Motivos e organizações cognitivas na construção da personalidade. *Revista Portuguesa de Pedagogia,* Ano XVI, 331-342.

BRAGA da CRUZ, M. et al. (1988). A situação do professor em Portugal. *Análise Social,* Vol. XXIV, 1187-1293.

CROZIER, M. (1965). *Le monde des employés de bureau.* Paris: Editions du Seuil.

DECI, E. L. (1975). *Intrinsic Motivation.* New York: Plenum Press.

ERIKSON, E. H. (1968). *Identity: youth and crisis.* New York: Norton & Company.

ESTEVE, J. M. (1987). *El malestar docente.* Barcelona: Laia.

FELDMAN, D. & GAGNON, J. (1986). *Statview 512 + TM.* Calabasas: Abacus Concepts, Inc.

GONÇALVES, Ó. (1986). Contribuições para uma perspectiva cognitivista na formação de professores. *Jornal de Psicologia, 5,* 1, 21-25.

JESUS, S. N. (1990). A motivação dos professores. Estudo exploratório sobre a influência da formação educacional e da prática profissional. Poster apresentado no II Seminário *"A Componente de Psicologia na Formação de Professores".* Évora: Universidade de Évora.

NUTTIN, J. (1967). Problèmes de motivation humaine. Psychologie des besoins fundamentaux et des projects d'avenir. Milano: *Scientia.*

NUTTIN, J. (1980a). *Motivation et Perspectives d'Avenir.* Louvain: Presses Universitaires de Louvain.

NUTTIN, J. (1980b). *Théorie de la motivation humaine. Du besoin au project d'action.* Paris: Presses Universitaires de France.

NUTTIN, J. (1985). *Motivation, planning and actions: a relational theory of behavior dynamics.* Leuven and Hillsdale, N. J.: Leuven University Press & Erlbaum.

PITTMAN, T. S., EMERY, J. & BOGGIANO, A. K. (1982). Intrinsic and extrinsic motivational orientations: reward-induced changes in

preference for complexity. *Journal of Personality and Social Psychology*, 42 *(5)*, 789-797.

RAIN, J. S., LANE, I. M. & STEINER, D. D. (1991). A current look at the Job Satisfaction/Life Satisfaction relationship: review and future considerations. *Human Relations*, Vol. 44, *3*, 287-307.

RECKASE, M. D. (1984). Scaling Techniques. *In* G. Goldstein & M. Herson (Eds.), *Handbook of Psychological Assessment*. New York: Pergamon Press, 38-53.

NOTES

(1) Nuttin (op. cit.) believes that the M.I.M. can be used in more specific research if the leading words will be adapted to the intended objectives.

(2) Nuttin refers that "les sujets éprouvent comme plus intenses les catégories motivationnelles qui reviennent le plus fréquemment dans leurs expressions spontanées" (op. cit., 63).

(3) The procedure used was identical to the one followed in the construction of Motivational Objects Inventory (Nuttin, op. cit.) in which the subject must express his/her motivational intensity in relation to each one of those objects, in a seven degree Likert type scale. The high scores correspond to a high individual motivational intensity.

(4) This hypothesis is based on the relation between the frequency of the expressed motivational objects and the motivational intensity in relation to the same objects, refered by Nuttin (op. cit.), as well as in the acquired knowledge that the subjects expressed greater number of motivational objects in the responses to the Q.I.E.M.-Profession than in the responses to the Q.I.E.M.-Course.

(5) While to the sample A were administered the E.M.-Course and E.M.-Profession scales, to the sample B were also administered the O.M.-Course and O.M.-Profession questionnaires. In both samples the instruments were given in groups.

(6) We present in here only the higher saturations for each item.

(7) Pittman, Emery & Boggiano (1982) distinguish from the intrinsic and extrinsic motivational orientation, according to the task being considered an end or a mean, respectivelly. We think that the results show that profession is not only a mean for something.

TABLES

Table 1: Distribution of the motivational objects obtained with the responses to the Q.I.E.M.-Course and Q.I.E.M.-Profession, according to Nuttin's content categories or subcategories.

	S	SR	E	R	R2	R3	C	C2	C3	P
Q.I.E.M.-Course	9	31	30	1	31	21	3	1	2	1
Q.I.E.M.-Profession	37	35	1	3	12	0	32	6	12	6

Tables 2 and 3: Item-total correlation to the results of Scale E.M.-Course (2) and Scale E.M.-Profession (3).

Table 2:	Sample A	Sample B
1	.594	.597
2	.553	.539
3	.477	.664
4	.552	.552
5	.552	.617
6	.525	.528
7	.476	.629
8	.581	.681
9	.610	.480
10	.479	.660

Table 3:	Sample A	Sample B
1	.662	.641
2	.513	.576
3	.679	.785
4	.682	.715
5	.632	.502
6	.666	.609
7	.767	.737
8	.572	.666
9	.709	.826
10	.665	.674

Table 4: Factorial analysis results sinthesis of Scale E.M.-Course data, with Transformation Method-Orthotran/Varimax.

	Sample A			Sample B		
	F1	F2	hi2	F1	F2	hi2
1(E)	.638		.479	.673		.491
2(SR)	.612		.394	.580		.367
3(C3)		.558	.315		.598	.477
4(R3)		.596	.406		.436	.369
5(E)	.822		.676	.760		.579
6(R2)		.642	.413		.794	.641
7(SR)	.643		.414	.608		.481
8(R2)		.754	.572		.563	.507
9(S)	.876		.769	.773		.599
10(R2)		.618	.383		.849	.729
Eighenvalues	3.051	1.770	4.821	3.696	1.545	5.241
% var. contr.	56	44		54.2	45.8	
Fact. correl.	.121			.19		

Table 5: Factorial analysis results sinthesis of Scale E.M.-Profession, with Transformation Method-Orthotran/Varimax.

	Sample A			Sample B		
	F1	F2	hi2	F1	F2	hi2
1(SR)	.728		.568		.862	.749
2(C)		.870	.757	.725		.535
3(S)	.725		.574		.699	.711
4(SR)		.664	.607	.611		.528
5(P)	.703		.494		.568	.324
6(C)		.794	.697	.794		.636
7(S)	.706		.640	.608	.866	.791
8(S)		.628	.437	.816	.563	.683
9(R2)	.792		.660	.773	.714	.794
10(C)	.585		.660	.731	.849	.577
Eighenvalues	4.403	1.429	5.832	4.764	1.564	6.328
% var. contr.	56.5	43.5		51.9	48.1	
Fact. correl.	.557			.271		

Tables 6 and 7: Mean results obtained with Anova in Scale E.M.-Course (6) and Scale E.M.-Profession, for each one of motivational orientation situations.

Table 6:		N	M
QM	Less	24	5.321
	Great	85	5.682

Comparation:	M. Dif.	Fisher PLSD
Great vs. Less	.362	3.51*

*Signif. at 95%

Table 7:		N	M
QM	Less	19	5.716
	Interm.	58	6.033
	Great	31	6.065

Comparation:	M Dif.	Fisher PLSD
Interm. vs Less	.317	.393
Great vs. Less	.349	.434
Great vs. Interm.	.032	.331

Table 8: Mean results obtained with Anova in Scale E.M.-Profession, for each one of motivational intensity situations in Scale E.M.-Course.

		N	M
EM-Course	Less	47	5.549
	Great	62	6.324

Comparation:	M. Dif.	Fisher PLSD
Great vs. Less	.775	.249*

*Signif. at 95%

Tables 9 and 10: Mean diferences results between intrinsic and extrinsic items in Scale E.M.-Course (9) and Scale E.M.-Profession (10) with T-test.

Table 9:	Sample A	Sample B
Intrinsic M	5.937	5.870
Extrinsic M	5.388	5.336
T-test	p=.0001	p=.0001

Table 10:	Sample A	Sample B
Intrinsic M	6.298	6.077
Extrinsic M	5.893	5.903
T-test	p=.0001	p=.0055